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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,650	11/09/2001	Derek Ward	P67300US0	5599

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EXAMINER

JARRETT, RYAN A

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,650	Applicant(s) WARD, DEREK	
	Examiner Ryan A. Jarrett	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/16/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in New Zealand on 11/9/00. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1, 9, and 20 are objected to because of the following informalities:

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In claim 1 line 2, "user input interface" should be changed to "input interface" since there does not appear to be any user involvement with this input interface, per the Applicant's disclosure.

In claim 1 line 4, "user output interface" should be changed to "output interface" since there does not appear to be any user involvement with this output interface, per the Applicant's disclosure.

Claim 9 should depend from claim 8 instead of claim 4 for antecedent basis purposes.

In claim 9 line 4, "," should be inserted after "units".

In claim 9 line 5, "," should be inserted after "units".

In claim 9 line 9, it appears as though "said secondary relocation address storage" should be changed to "said relocation address storage".

In claim 9 line 20, "." should be inserted after "transferred".

In claim 20 line 7, "as illustrated by the accompanying drawings" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 3-9 and 17-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 3, the specification does not appear to enable reading and writing data values to and from the state data storage units “while the user control program continues to perform control functions”. The limitation “while” implies that the reading/writing and control function acts occur at the same time. However, reference is made to page 9 line 26 – page 10 line 3, and Fig. 7, of the Applicant’s specification. The reading/writing of the state data takes place during time period 37, whereas the control functions take place during time period 23b. It can be seen in Fig. 7 that these time periods are sequential and non-overlapping, and thus the reading/writing and control functions cannot and do not occur at the same time.

Claims 4-9 and 17-20 depend from claim 3 and incorporate the same deficiencies.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-2 and 10-14 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Vasko U.S. Patent No. 6,463,339. For example, Vasko discloses the features of:

Claim 1 (e.g., col. 2 line 50 – col. 3 line 30, col. 5 lines 45-67, col. 6 lines 38-67)

Claim 2 (e.g., col. 7 lines 1-40)

Claim 10 (e.g., col. 8 lines 12-61, Figs. 7-10)

Claim 11 (e.g., col. 9 lines 6-16, Fig. 11)

Claim 12 (e.g., Fig. 13 #24, Fig. 13 #80)

Claim 13 (e.g., Fig. 14a, col. 9 line 59 – col. 10 line 19, particularly col. 10 lines 11-14)

Claim 14 (e.g., col. 9 lines 14-40)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vasko as applied to claim 2 above, and further in view of Spiller U.S. Patent No. 5,057,994. Vasko discloses an input signal monitoring function block used to produce a

reconciled input value if there is a conflict in values (e.g., col. 10 lines 20-37, Fig. 15). Vasko does not explicitly disclose that this function block receives input signals from multiple duplicate sensors and determines as the invalid signal the odd-one-out. Vasko does however disclose that the same mechanisms described for the output signal processing can be used in the input block processing (col. 10 lines 20-22). The mechanisms referred to here are the determining of the majority gate-array output value (e.g., col. 9 lines 6-67), i.e. (voting or determining odd-one-out). Thus, Vasko just lacks the teaching of multiple duplicate sensors.

Spiller discloses a control system for an industrial plant that includes voting logic for multiple redundant sensors (e.g., claim 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Vasko with Spiller since Spiller teaches that the use of redundant sensors reduces the probability of control system failure to produce an extremely reliable control system (e.g., col. 5 line 62 – col. 6 line 3).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan A. Jarrett
Examiner
Art Unit 2125

3/12/05

A handwritten signature in black ink, appearing to read "L. P. Picard". The signature is written in a cursive, flowing style.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100